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			2621	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Application No. Applicant(s) 09/823 509 FERNANDEZ ET AL. Office Action Summary Examiner Art Unit Tuna Vo 2621 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status Responsive to communication(s) filed on 07/31/2009. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 24-33 and 39-53 is/are pending in the application. 4a) Of the above claim(s) 1-23 and 34-38 is/are withdrawn from consideration. 5) Claim(s) _____ is/are allowed. 6) Claim(s) 24-33 and 39-53 is/are rejected. 7) Claim(s) _____ is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) ☐ The drawing(s) filed on 29 March 2001 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abevance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner, Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some * c) ☐ None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)

Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.

Paper No(s)/Mail Date.

6) Other:

5) Notice of Informal Patent Application

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DETAILED ACTION

Claim Rejections - 35 USC § 103

- The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all
 obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- Claims 24-32, 39-40, and 42-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Everett, Jr. et al. (US 5,202,661) in view of Hyuga (US 5,818,733).

Re claims 24, 27, and 31, Everett teaches a system (figures 1, 2, 4, and 6) comprising:

a communicator (16 and 20 of fig. 1. see also 16 and 20c of fig. 2) configured to receive
first data associated with an object (note the fixed sensor system, 12 of fig. 1, detects the presence
of an intruder that is considered as the first data associated with an object; col. 6, lines 24-40;
col. 22, lines 35-50; col. 28, lines 50-64) and second data associated with the object (note the
mobile sensor, 19 of fig. 2, detects the presence of the object that is considered as second data
associated with the object; col. 13, lines 5-14; col. 14, lines 1-14, 20-29; 14, line 55-col. 15, line
7), wherein the first data is received from a fixed detector configured to detect the first data (12
of fig. 2, the fixed sensor system), and wherein the second data is received from a mobile target
unit (18 of fig. 1, the mobile robot, fig. 6) comprising a sensor (19 of fig. 1, the mobile sensor
system, see figure 4 for more details) configured to detect the second data; and

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a processor (14 of figs. 1 and 2) configured to correlate the first data and the second data to generate object location information (col. 2, lines 44-64, col. 3, lines 35-42, 49-56; col. 24, lines 39-col. 25, line 4; col. 28, lines 50-65, note Cross correlation between the fixed sensor system, 12 of fig. 2, and the mobile sensor system, 19 of figs. 1 and 4, to determine an intruder at position (X, Y) as object location information; wherein the (X,Y) position of the intruder depicted in a floor plan map, col. 29, lines 5-9).

It is noted that Everett teaches that the mobile target unit has the propulsion module (416 of fig. 6) for moving the mobile target unit, and the propulsion module (426 of fig. 6) carried the camera and other elements as shown in figure 6, so this would obviously suggest that the mobile target unit includes a vehicle (416 and 422 of fig. 6) to move the mobile target unit.

However, Everett does not particularly disclose wherein the mobile target unit is at least one of: mounted in the object, mounted on the object, carried in the object, or carried on the object, and the object is a vehicle as claimed.

Hyuga teaches the mobile target unit (1 of fig. 2) is at least one of: mounted in the object (the mobile unit is carried by said sender or player or user), mounted on the object, carried in the object, or carried on the object (1 of fig. 2, the mobile unit can be held by the golf player, fig. 4, and carried on the golf cart, 29 of fig. 2) and the object is a vehicle (the golf cart, 29 of fig. 2).

Therefore, taking the teachings of Everett and Hyuga as whole, it would have been obvious to one of ordinary skill in the art to modify the teachings of Hyuga into the system of Everett for the same purpose of generating the accuracy object location to improve monitoring object.

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Re claim 25, Everett further teaches wherein the mobile target unit (18 of fig. 1, the mobile robot) comprises a locator unit (402 of fig. 4, note the local processor, 402 of fig. 4, passes required position and sonar information to the host computer, col. 7, lines 63-col. 8, lines 25) configured to determine a target unit location (Note the local processor receives X-Y position and heading from processor, 417 of fig. 4, of propulsion module, 416 of fig. 4, which is considered as a determined a target location), the communicator (16, 20a, and 20c of fig. 2) being further configured to receive the target unit location (note the local processor, 402 of fig. 4, passes required positional and sonar information to the host computer, 14 of fig. 1), the processor (14 of fig. 1) being further configured to determine whether the mobile target unit is within a range of the fixed detector (fig. 14, A-B indicates the mobile robot will be travel, so the mobile robot is within the range of the fixed sensor system; col. 3, lines 9-24).

Re claim 26, Everett further teaches wherein the object location information comprises at least one of object trajectory information (col. 2, lines 34-39, the intruder's report is considered as object trajectory information) or object speed information (note the robot's mean forward velocity is adjusted as a function of range to the intruder, which means the mobile robot enables to determine the object speed information so that the mobile robot to follow the intruder, col. 29, lines 15-23); and the fixed detector provides an image of the object (12g1 of fig. 2, the video camera captures an image of the intruder).

Re claim 28, Everett further teaches a database (Data stored in the history file is considered as database, col. 23, lines 40-55, col. 23, line 65-col. 24, line 18) configured to maintain a plurality of current positions associated with at least one of a plurality of sensors, a plurality of mobile target units, or a plurality of objects.

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Re claim 29, Everett further teaches wherein the mobile target unit comprises an accelerometer (417 of fig. 4, note velocity control and acceleration/deceleration ramping are performed by processor, 417) configured to provide data indicative of movement of the object to facilitate generating the object location information.

Re claim 30, Everett further teaches wherein: the object is an identified good (Note the area under surveillance by the fixed and mobile sensors is considered as an identified good, col. 21. line 64-col. 22, line 2); the mobile target unit (18 of fig. 2, the mobile robot) comprises a radio-frequency identification device (20b1 and 20b2 of fig. 2); and the fixed detector (12 of fig. 2) comprises a camera (12g1 of fig. 2) for observing the identified good (the area under surveillance), to facilitate thereby enabling the sensor (19 of fig. 4) and the fixed detector (12 of fig. 2) to provide corroborative surveillance of the identified good (col. 22, lines 35-50, see also col. 29, lines 1-9).

Re claim 39, Everett further teaches wherein the mobile target unit (18 of fig. 1, the mobile robot) comprises a locator unit (402 of fig. 4) coupled to determine a target unit location (col. 8, lines 8-25), the second data comprising the target unit location (col. 8, lines 8-25).

Re claim 40, Everett further teaches wherein the correlating the first data and the second data comprises determining compliance with a scheduled object activity (function of time, col. 13, lines 1-13).

Re claim 42, Everett further teaches a plurality of detectors (12g1 of figs. 2 and 4) each having a corresponding observation range (12g1 of fig. 1, note the video camera, 12g1 of fig. 2, has a corresponding to observation range), wherein at least one of the plurality of detectors is selected to observe the object (12g1 of fig. 4, the video camera, 12g1, follows the intruder), the

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fixed detector (12g1 of fig. 2, col. 29, lines 1-9) being selected in response to the processor's correlation of the first data and the second data (col. 28, lines 58-64).

Re claim 43, Everett further teaches wherein the first data comprises at least one of an image of the object (12g1 of fig. 2, the video camera captures image of the intruder) or an identifier associated with the object.

Re claim 44, Everett further teaches wherein the first data comprises a plurality of images of the object captured at different times (Note video signal from the video camera, 12g1 of fig. 2, have images of the object at different times).

Re claim 45, Everett further teaches wherein the second data comprises at least one of an image of the object (e.g. 19h of fig. 6, the video camera captures image of the intruder) or an identifier associated with the object.

Re claim 46, Everett further teaches wherein the second data comprises a plurality of images of the object captured at different times (note the video camera, 19h of fig. 6, inherently captures images of the intruder at different times).

Re claim 47, Everett further teaches wherein the object location information is determined at least in part based on a fixed detector location (e.g. 12 of fig. 2).

Re claim 48, Everett further teaches wherein the object location information is determined at least in part based on a mobile target unit location (18 of fig. 2).

Re claims 32 and 49, Everett further teaches a movement module (col. 28, line 55-57, note the threat level is sufficient for the software(the software is performed by the computer is considered as a movement module) to activate secondary sensors, and the ultrasonic motion detection system, 19f of fig. 4, is enabled) configured to activate a second fixed detector (note the

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secondary sensors are activated) in response to the object location information (Note thread level includes the object location information), wherein the fixed detector (e.g. 12e of fig. 2) is further from the second fixed detector (e.g. 19e of fig. 4) than from a third fixed detector (12d of fig. 2).

 Claims 24-33 and 39-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moengen (US 6,373,508).

Re claims 24 and 31, Moengen teaches a system (figs. 1 and 2) comprising:

a communicator (M, BL, and Q of fig. 2) configured to receive first data (e.g. D1 and K1 of fig. 1, note transponders are also preferably provided both in the position detectors and the cameras, col. 12, lines 25-31) associated with an object (a natural object N, col. 3, lines 37-42) and second data associated with the object (mobile cameras are used. col. 12, lines 27-31; and col. 15, lines 10-38), wherein the first data is received from a fixed detector (D1 and K1 of fig. 1; see D1 of fig. 2) configured to detect the first data (note the position and image of the natural object is considered as the first data, e.g. figs. 3a-d), and wherein the second data is received from a mobile target unit (note the mobile camera is used; col. 12, lines 27-31; and col. 16, lines 10-38) comprising a sensor (a GPS is equipped with the mobile camera, col. 16, lines 11-20) configured to detect the second data (the position of natural object is determined by other means, col. 16, lines 12-20, the GSP is wirelessly connected to the position module M in figure 2); and,

a processor (Q and P of fig. 1) configured to correlate (1 and 2 of fig. 2) the first data (the position of the natural object N is detected by the detector and camera, D1 and K1 of fig. 1) and the second data (the position of the natural object N is detected by the GPS, which is in a field of

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view of a camera as the mobile unit, col. 16, lines 11-20) to generate object location information (e.g. figs. 9a, b, c, note the system for manipulating (4 of fig. 2) the picture of at least one movable, natural object in a natural television picture in such a manner that the object's position and movement are clearly visible in the television picture, col. 4, lines 51-63; wherein synthetic object represent position of the natural object any 1 time, which indicates the future position of the natural object).

Moengen further teaches the object is a vehicle (a natural object would obviously considered a vehicle such as car race); and the mobile target unit (e.g. mobile camera include GPS, col. 16, lines 11-20, the GPS is equipped with the natural object) at least on of: mounted in the object, mounted on the object, carried in the object, or carried on the object (col. 10, lines 10-14).

Re claims 25 and 39, Moengen further teaches wherein the mobile target unit (note the mobile camera, col. 16, lines 18-20) comprises the communicator (Q of figs. 1 and 2) is further configured to receive the target unit location, the processor (Q and P of fig. 1. the processing units 1-2 of fig. 2) being further configured to determine whether the mobile target unit (the mobile camera can be determined by the GPS) is within a range of the fixed detector (the nobile camera with the GPS within the field of view of a camera, e.g. K1, K2, or K3 of fig. 1; col. 16, lines 12-14).

Re claim 26, Moengen further teaches the object location information comprises at least one of object trajectory information (fig. 9c, S(p0), S(p1), S(p2) and S(p3)), or object speed

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information (col. 9, lines 3-8); and the fixed detector provides an image of the object (e.g. K1 of fig. 1).

Re claim 27, Moengen further teaches the object is a vehicle (a natural object would obviously be considered as a vehicle used in the car race event)(e.g. mobile camera include GPS. col. 16, lines 11-20, the GPS is equipped with the natural object).

Re claim 28, Moengen further comprising a database (Note pre-stored code sequences as position and image of the natural object is considered as database, col. 11, lines 30-35) configured to maintain a plurality of current positions associated with at least one of a plurality of sensors (e.g D1 and D2 of fig. 1), a plurality of mobile target units (e.g. mobile cameras, col. 12, lines 28-31), or a plurality of objects (natural objects: N1 and N2).

Re claim 29, Moengen further teaches wherein the mobile target unit comprises an accelerometer (T of fig. 2, note the active transponder also has to be mounted in the natural object, it has to be robust and capable of withstanding jolts and shocks as well as relative high accelerations) configured to provide data indicative of movement of the object to facilitate generating the object location information (col. 10, lines 10-14).

Re claim 30, Moengen further teaches the object is an identified good (Note the natural object N is broadly interpreted as an identified good such as foot ball, hand ball, tennis ball, golf ball, and ice hockey pucks); the mobile target unit (the mobile camera, col. 15, lines 65-col. 16, lines 4) comprises a radio-frequency identification device (e.g. a wireless connection is inherently as a radio-frequency identification device, col. 16, lines 3-20); and the fixed detector (D1 of fig. 1) comprises a camera (K1 of fig. 1) for observing the identified good (e.g. the natural object N is within the field of view of the camera K1 of fig. 1), to facilitate thereby enabling the

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sensor (e.g. GPS sensor is equipped into the mobile camera, col. 16, lines 12-20) and the fixed detector (note the mobile camera wirelessly communicates with the processing unit Q via data buses B, col. 16, lines 1-3) to provide corroborative surveillance of the identified good (e.g. Q and P of fig. 1, see figs. 9a-c).

Re claim 32, Moengen teaches activating a second fixed detector (D2 and K2 of fig. 1) in response to the object location information (e.g. TK and D2 of fig. 1, processed by the processing unit, 1 and 2 of fig. 2).

Re claim 33, Moengen further teaches wherein the second data comprises an object identifier (Note the synthetic object S can be represented with various attributes for size, shape and color, which is considered as an object identifier, col. 7, lines 37-47), the method further comprising registering the object identifier (e.g. various attributes for size, shape and color of synthetic object S is pre-stored) in a database (e.g. Q and P of fig. 1) to indicate association with the object (figs. 9a-c).

Re claim 40, Moengen further teaches wherein the correlating the first data and the second data comprises determining compliance with a scheduled object activity (e.g. figs. 3a-4d, x, y, z, t).

Re claim 41, Moengen further teaches wherein the correlating the first data and the second data comprises determining a movement vector (col. 4, lines 26-49) to predict a future location of the object (not the speed, direction and the position of the natural object is shown on display, e.g. P of fig. 1, indicating the future location of the object).

Re claim 42, Moengen further teaches further comprising a plurality of detectors (TK, D1, K1; TK, D2, K2; and TK, D3, K3 of fig. 1, plurality cameras) each having a corresponding

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observation range, wherein at least one of the plurality of detectors is selected to observe the object (note a preselected x,y,z co-ordinate system at the time t, which means one of the camera is selected, K2 of fig. 1, see fig. 3b), the fixed detector being selected in response to the processor's correlation of the first data and the second data (e.g. 3 of fig. 2, camera control system based on the correlating performed by the processor, Q, 1, 2, and 4 of fig. 2).

Re claim 43, Moengen further teaches wherein the first data comprises at least one of an image of the object (e.g. IK2 of fig. 3A) or an identifier associated with the object (D1 of fig. 1).

Re claim 44, Moengen further teaches wherein the first data comprises a plurality of images of the object captured at different times (IK2 of fig. 3A and IK2 of fig. 3c).

Re claim 45, Moengen further teaches wherein the second data (e.g. K3 of fig. 1 as the mobile camera) comprises at least one of an image of the object (e.g. IK3 of fig. 4a) or an identifier associated with the object (D3 of fig.1, and GPS is equipped with the mobile camera).

Re claim 46, Moengen further teaches wherein the second data comprises a plurality of images of the object captured at different times (figs. 4a and 4c).

Re claim 47, Moengen further teaches wherein the object location information is determined at least in part based on a fixed detector location (VZ2, and V'Z2 of figs. 3a and 3c).

Re claim 48, Moengen further teaches wherein the object location information is determined at least in part based on a mobile target unit location (GPS system determines the location of the natural object).

Re claim 49, Moengen further teaches a movement module configured to activate a second fixed detector (e.g. TK, D2, K2 of fig. 1) in response to the object location information (1 and 2 of fig. 2).

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Re claim 50, Moengen further teaches wherein the correlating the first data and the second data to generate the object location information comprises determining at least one of a trajectory or a speed of the object (col. 9, lines 3-7; col. 14, lines 33-36).

Re claim 51, Moengen further teaches wherein the mobile target unit comprises a locator unit configured to determine the target unit location mobile (a position of the mobile camera is determined by the GPS; col. 16, lines 11-17).

Re claim 52, Moengen further teaches wherein the fixed detector is configured to be selected in response to the processor's correlation of the first data and the second data processor's correlation of the first data and the second data (e.g. 3 of fig. 2, camera control system based on the correlating performed by the processor Q, 1, 2, and 4 of fig. 2).

Re claim 53, Moengen further teaches wherein the fixed detector is further from the second fixed detector than from a third fixed detector (TK, D3, K3 of fig. 1).

Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Everett, Jr. et al.
 (US 5,202,661) in view of Hyuga (US 5,818,733) and further in view of Kitamura et al.
 (5,554,983).

Re claim 41, Everett and Hyuga does not particularly disclose wherein the correlating the first data and the second data comprise determining a movement vector to predict a future location of the object as claimed.

Kitamura teaches wherein the correlating the first data and the second data (fig. 6) comprise determining a movement vector to predict a future location of the object (fig. 8).

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Taking the teachings of Everett, Hyuga, and Kitamura as a whole, it would have been obvious to one to modify the teachings of Kitamura into the combined of Everett and Hyuga to reduce the processing time and accurately predict the object's position.

Response to Arguments

 Applicant's arguments filed 07/36/2009 have been fully considered but they are not persuasive.

The applicant argued that Everett teaches against " wherein the mobile target unit is at least one of: mounted in the object, mounted on the object, carried in the object, or carried on the object" as amended in claim 1.

The examiner respectfully disagrees with the applicant. It is submitted that Everett teaches that the mobile target unit (18 of fig. 6) has the propulsion module (416 of fig. 6) for moving the mobile target unit (18 of fig. 6), and the propulsion module (426 of fig. 6) carried the camera and other elements as shown in figure 6, so this would obviously suggest that the mobile target unit includes a vehicle (416 and 422 of fig. 6) for the mobile target unit is mounted on in order to move the mobile unit.

Hyuga teaches the mobile target unit (1 of fig. 2) is at least one of: mounted in the object (a mobile unit carried by said sender or player or user), mounted on the object, carried in the object, or carried on the object (1 of fig. 2, the mobile unit can be hold by the golf player, fig. 4, and carried on the golf cart, 29 of fig. 2) and the object is a vehicle (the golf cart, 29 of fig. 2). With the suggested teachings of Everett and Hyuga, one skilled in the art would combine Everrett and Hyuga to make obvious claimed features to improve monitoring object.

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The applicant further argues that Moengen does not disclose "a processor configured to correlate the first data and the second data to generate object location information" as claimed.

The examiner respectfully disagrees with the applicant. It is submitted that Moegen teaches a processor (Q and P of fig. 1) configured to correlate (1 and 2 of fig. 2) the first data (the position of the natural object N is detected by the detector and camera, D1 and K1 of fig. 1) and the second data (the position of the natural object N is detected by the GPS, which is in a field of view of a camera as the mobile unit, col. 16, lines 11-20) to generate object location information (e.g. figs. 9a, b, c, note the system for manipulating (4 of fig. 2) the picture of at least one movable, natural object in a natural television picture in such a manner that the object's position and movement are clearly visible in the television picture, col. 4, lines 51-63; wherein synthetic object represent position of the natural object any t time, which indicates the future position of the natural object). Note claim features do not include any image that is used to generate object location. Therefore, the disclosure of Moengen meets the claimed features.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tung Vo whose telephone number is 571-272-7340. The examiner can normally be reached on Monday-Wednesday, Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on 571-272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tung Vo/

Primary Examiner, Art Unit 2621